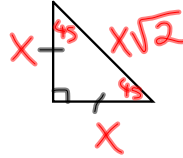


- 10-2 45-45-90 Triangles
 10-3 30-60-90 Triangles

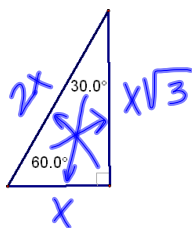
Theorem 10.1--In a 45-45-90° triangle, the length of the hypotenuse is $\sqrt{2}$ times the length of the leg



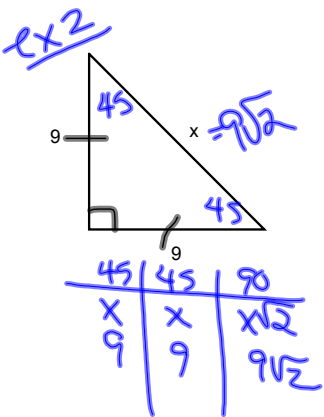
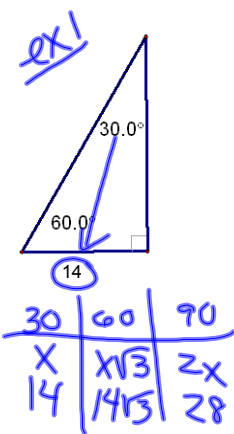
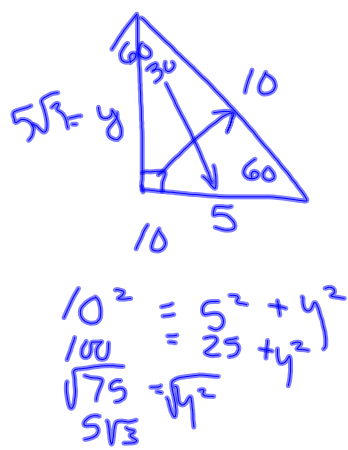
45	45	90
X	X	$X\sqrt{2}$
3	3	$3\sqrt{2}$
5	5	$5\sqrt{2}$
7	7	$7\sqrt{2}$
10	10	$10\sqrt{2}$
14	14	$14\sqrt{2}$
$4\sqrt{2}$	$4\sqrt{2}$	8 *
$5\sqrt{2}$	$5\sqrt{2}$	10
$7.5\sqrt{2}$	$7.5\sqrt{2}$	15

$$\frac{8}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{8\sqrt{2}}{2} = 4\sqrt{2}$$

Theorem 10.2--In a 30-60-90 triangle, the length of the hypotenuse is twice the length of the shorter leg and the length of the longer leg is $\sqrt{3}$ times the length of the shorter leg



30	60	90
X	$X\sqrt{3}$	2X
5	$5\sqrt{3}$	10
6	$6\sqrt{3}$	12
2	$2\sqrt{3}$	4
9	$9\sqrt{3}$	18
7	$7\sqrt{3}$	14
3	$3\sqrt{3}$	6
$3\sqrt{3}$	9	$6\sqrt{3}$ *
$6\sqrt{3}$	18	$12\sqrt{3}$ ÷3
$5\sqrt{3}$	15	$10\sqrt{3}$
$\frac{7}{3}\sqrt{3}$	7	$\frac{14}{3}\sqrt{3}$
$\frac{23}{3}\sqrt{3}$	23	$\frac{46}{3}\sqrt{3}$



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p545 6-8, 12-15

p552-553 11-21, 30-32

